

# 1000S04 POWER AMPLIFIER

# 1000 Watts RF Power For:

- Industrial
- Lab Use
- 20 400 KHz
- S- Series
  - Sample Ports
- Solid State Reliability
- Forced Air Cooling



The 1000S04 Amplifier is a rugged source of RF power for ultrasonic applications. It is a totally solid state solution employing Power MOSFETS in a full bridge PWM power stage. Operating at a significantly higher frequency than the fundamental signal

#### **Flexible Operation:**

The 1000S04 produces 1000 Watts of power over a frequency range of 20 to 400 KHz, with a nominal power gain of 60 dB (+/-1dB). Operation over the entire frequency range is possible without the need for any switching or tuning

Sample ports are provided:  $50\Omega$  termination Voltage Sample 1V/50V rms Current Sample 1V/A rms

Samples are the actual output waveform scaled as shown.

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# **Class of Operation**

Class D/S

#### Frequency Range

20 to 400 KHz

#### Rated Power Output

1,000 Watts – into 50  $\Omega$ 

#### Power Gain / Voltage Gain

60 dB nominal

#### **Gain Flatness**

+/- 1 dB into 50  $\Omega$ 

#### Input Power for Rated Output

1 mW or 0 dBm (223 mV rms) Into 50  $\Omega$ 

# Input Impedance

50  $\Omega$  / VSWR 1.5:1 Max (optional 10 K $\Omega$ )

## Load Impedance

50  $\Omega$  / VSWR 1.1:1 Max for rated power

#### Ruggedness

Any load VSWR, any phase from open to Short circuit without damage.

## **Drive Source Requirements**

Any signal source capable of developing min 0 dBm into 50  $\Omega$  (1 mW / 223 mV / 632 mVp-p)

#### Protection:

INPUT: unit will withstand up to +30 dBm input without damage.

THERMAL: the unit can operate at 45°C ambient.

#### **Accessories Supplied**

The unit is supplied with an operations manual and line cord.

#### Unit Efficiency (DC-RF) into 50 $\Omega$

> 80% @ full output

#### **AC Power**

84-240 VAC

## Temp. Range Operating

 $0 - 45^{\circ} C$ 

#### Cooling

Forced air (front to back)

#### Weight

14lbs / 6.35 Kg.

#### **Dimensions**

2 U Full Rack H = 3.5" / 88.9 mm W = 19" / 482.6 mm L = 22.5" / 571.5 mm



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